



4th Quarter 2019

THE MELTMINDER

A PUBLICATION BY BENTON FOUNDRY, INC.

Web Site: <http://www.bentonfoundry.com>

Benton Foundry Then and Now



Prior to 1996 at Benton Foundry, iron was melted in a cupola. This non-water cooled, coke-fired unit was limited to around 55 tons per day and could only operate one shift per day. At the end of the shift, the doors at the bottom would be opened, dropping out the remaining coke, iron, slag and limestone. The area would be cooled and cleaned up. Every night a crew would reline the inside with refractory, close the doors, install a sand bed above the doors and start the melting process all over again. The operation required a three-man charging crew, cupola tender and two more at night, to reline and prep.

Today, Benton Foundry melts with medium frequency electric induction furnaces. These furnaces, built by Inductotherm, have capacity to melt 300 tons per day and can operate 24 hours per day. The furnaces have load cells and fiber optic controls, providing much improved chemistry and temperature control. The furnaces also have demand control technology to monitor and control our electricity consumption. Today's system only requires a crane operator and furnace operator on each shift.

Also, with respect to the environment, the cupola had a wet scrubber pollution control system that required a lot of maintenance time and care. The new furnaces are controlled by a baghouse which is tested every five years per the Pennsylvania Department of Environmental Protection. The most recent test recorded a discharge rate of 0.001 gr/DSCF versus a permit level of 0.005 gr/DSCF. In other words the permit is 0.005 gr/DSCF, and we tested at 20% of that number at 0.001. Compared to the old collection permit of 0.018 gr/DSCF, we are 94% below previous permit levels. For you old-timers, these numbers are well below what the cupola was permitted for.



Debt

One of the largest issues facing the USA is a self-inflicted financial disaster headed our way, on multiple fronts. Just like you can't spend more than you make and live on credit cards, the federal government cannot spend more than it takes in year after year. The issue is going to blowup sooner than later. The State and Local Governments have to balance their budgets. Here are some myths and realities on the situation.

Myths about the Deficit and Debt

*Jack Alexander
AICPA*

Myth	Reality
The national debt will not impact senior citizens. However, I am troubled about impact on our grandchildren.	The situation is likely to reach a crisis level in the next 2-5 years
Since we contributed to the Social Security and Medicare trusts, there are assets available for our benefits.	The federal government transferred all assets to the Treasury and issued IOU's. There are no true assets available for the government to draw on.
The problem is easily solved if the elected officials set aside partisan differences.	Our elected officials have "kicked the can down the road" for so long that drastic measures are now required.
If we tax the rich, we can erase the deficit and fund more programs.	Putting aside practical issues and economic effects, taxing the rich, even at 100%, would only decrease the <u>current</u> deficit by 25%

No Attempts at Reform have succeeded since the 1980's

	NATIONAL COMMISSION ON SOCIAL SECURITY REFORM aka The Greenspan Commission	Bipartisan Commission on Entitlement and Tax Reform aka Clinton Commission	Commission to Strengthen Social Security.	NATIONAL COMMISSION ON FISCAL RESPONSIBILITY AND REFORM aka Simpson-Bowles
Commissioned by:	President Regan	President Clinton	President Bush (43)	President Obama
Date	January 1983	Est 1994	2005	December 2010
Charter	Address imminent shortfall of Social Security	Entitlement Reform and Deficit/Debt	Social Security Reform	Make recommendations on untenable Entitlement Programs
Major Recommendations	Increase in Payroll Taxes and delays in normal retirement dates	No Agreement Reached	Advocated Personal Retirement Accounts	Report Labeled "The Moment of Truth"
Result	Addressed Short-term crisis and recommended additional long-term actions Several Short and Long- term changes adopted	Failed to make progress and never even issued final report NO ACTION!	No action taken by Congress NO ACTION!	Failed to reach majority consensus required to submit to Congress for action NO ACTION!

A Waste of Resources

Waste Hides in Plain Sight

William A. Levinson, P.E. is the principal of Levinson Productivity Systems, P.C. He is the author of *The Expanded and Annotated My Life and Work: Henry Ford's Universal Code for World-Class Success*.

"How many of our competitor's workers does it take to change a light bulb? Four: one to hold the bulb, and three to turn the ladder." This joke is funny until we discover jobs or processes in our own workplaces that waste even more than 75% of the labor, cycle time, materials, and/or energy involved. In *My Life and Work*, Ford, who grew up on a farm, cited waste as great as 95%.

Waste of Energy

The difference between the actual energy use and the most efficient possible energy use, is waste.

- Thought process: "The fire-fly converts the hydrocarbons of its food into light with an efficiency of 40 percent. It flashes its light at intervals, thus making it most effective by contrast with the surrounding darkness, and it emits no more light than is necessary for its purpose."
- The firefly shows us where we could be in contrast to where we are. The difference is the gap between current and potential performance.

Waste of Materials

Henry Ford recognized long ago that any material that does not become part of the finished product is waste. Reuse and recycling were routine at the Ford Motor Company.

Example of watching the hole (literally)

- "In one of the stamping operations six-inch circles of sheet metal are cut out. These formerly went into scrap. The waste worried the men. They worked to find uses for the discs. They found that the plates were just the right size and shape to stamp into radiator caps but the metal was not thick enough. They tried a double thickness of plates, with the result that they made a cap which tests proved to be stronger than one made out of a single sheet of metal."
- Note that the front-line workers, and not management, noticed the waste.

Waste of Time

Time waste differs from material waste in - there can be no salvage. The easiest of all wastes, and the hardest to correct, is this waste of time, because wasted time does not litter the floor like wasted material.

Waste of Motion

Workers should observe how they (and others) do jobs, and take note of any motion that does not add value.

- It might be worth making videos of the jobs (as Gilbreth did more than 100 years ago) so the workers can see themselves doing them and notice any waste motion that is built in.

You can waste time, you can waste labor, you can waste material. Time, energy and material are worth more than money, because they cannot be purchased by money. Not one hour of yesterday, nor one hour of today can be bought back. Not one ounce of energy can be bought back. Some material wasted, is wasted beyond recovery.

The greatest barrier to the elimination of waste is frequently not the absence of an off the shelf technical solution, but rather failure to recognize the waste in the first place. Henry Ford's success secret consisted of (1) not taking any job for granted and (2) paying close attention to the manner in which a job used time, material, and energy. He also taught these skills to his entire workforce as shown by numerous employee-initiated, as opposed to the management-initiated, improvements. Today's manufacturers can achieve similar world-class results through the application of these principles.



Health

Opioid Epidemic

Opioid addiction is a long-lasting (chronic) disease that can cause major health, social, and economic problems. Opioids are a class of drugs that act in the nervous system to produce feelings of pleasure and pain relief. Some opioids are legally prescribed by healthcare providers to manage severe and chronic pain. Commonly prescribed opioids include oxycodone, fentanyl, buprenorphine, methadone, oxymorphone, hydrocodone, codeine and morphine. Some other opioids, such as heroin, are illegal drugs of abuse.

Opioid addiction is characterized by a powerful, compulsive urge to use opioid drugs, even when they are no longer required medically. Opioids have a high potential for causing addiction in some people, even when the medications are prescribed appropriately and taken as directed. Many prescription opioids are misused or diverted to others. Individuals who become addicted may prioritize getting and using these drugs over other activities in their lives, often negatively impacting their professional and personal relationships. It is unknown why some people are more likely to become addicted than others.

Opioids change the chemistry of the brain and lead to drug tolerance, which means that over time the dose needs to be increased to achieve the same effect.



that when people stop taking the drug, they have physical and psychological symptoms of withdrawal (such as muscle cramp-

ing, diarrhea and anxiety). Dependence is not the same thing as addiction; although everyone who takes opioids for an extended period will become dependent, only a small percentage also experience the compulsive, continuing need for the drug that characterizes addiction.



Opioid addiction can cause life-threatening health problems, including the risk of overdose. Overdose occurs when high doses of opioids cause breathing to slow or stop, leading to unconsciousness and death if the overdose is not treated immediately. Both legal and illegal opioids carry a risk of overdose if a person takes too much of the drug or if opioids are combined with other drugs.

Misuse of prescription opioids and heroin affects more than 2 million Americans and an estimated 15 million people worldwide each year. The prevalence of opioid misuse and addiction is rapidly increasing.

In 2016, more than 20,000 deaths in the United States were caused by an overdose of prescription opioids and another 13,000 deaths resulted from heroin overdose. Drug overdoses are now the leading cause of death in U.S. adults under age 50 and opioids account for more than half of all drug overdose deaths.

Opioid addiction is a complex disorder, and non-genetic factors also play a critical role. It is likely that a combination of health, social, economic and lifestyle factors interact with genetic factors to determine an individual's risk.

Reprinted from Genetics Home Reference:

<https://ghr.nlm.nih.gov/condition/opioid-addiction>

PA Get Help Now Hotline 1-800-662-4357

Health Tidbits

Headache - Eat plenty of fish. Fish oil helps prevent headaches. So does ginger, which reduces inflammation and pain.

Hay Fever - Eat lots of yogurt before pollen season. Also eat honey from your local area daily.

Arthritis - Salmon, tuna, mackerel and sardines are high in omega oils, which can help joint discomfort.

Upset Stomach - Bananas can help settle an upset stomach and ginger is good for nausea.

Colds - Garlic can help clear a stuffy head, it is also good for cholesterol.

Cholesterol - Avocados contain Mono unsaturated fat, which is considered a healthy fat.

Ulcers - Cabbage contains chemicals that are good for ulcers.



*Naturally Savvy
Natural Holistic Health*

Employees of the Quarter & Employees of the Year

Congratulations!

Congratulations to **Ray Campbell** (below), Benton Foundry's 2nd shift Employee of the Quarter. Ray has been employed at the Foundry since 2010. He currently works in our Melt Department. Ray is both a Crane and Furnace Operator. He has also poured iron and worked in our Grinding Room as a Cleaner Operator. Ray lives in Benton and he enjoys hunting and working on cars and trucks in his spare time.



Congratulations to **Amanda Hartman** (above), Benton Foundry's 1st shift Employee of the Quarter.

Amanda is also our 1st Shift Employee of the Year!

Amanda works in our Core Room as an Assistant Supervisor. She earned her Associate Degree in Applied Science in Automated Manufacturing Technology from Penn College while working as a core assembler. She has been employed since 2011. Amanda lives outside of Benton with her daughter Payton. She enjoys spending time with her daughter and their animals when she isn't working.



Congratulations to **Tyler Hartman** (left), Benton Foundry's **2nd & 3rd Shift Employee of the Year!**

Tyler works in our Maintenance Department. He has been a Maintenance Technician since 2017. Prior to 2017, Tyler worked in our Melt Department and has been employed since 2010. While in the Melt Department, Tyler was an Iron Pourer, Furnace Operator and an Assistant Supervisor. Tyler and his wife Kristy live outside of Lairdsville, with their daughter Peyton. Tyler enjoys spending time with his family, woodworking and riding ATVs in his spare time.



Outstanding Job!

Employee Savings and Retirement Plan

Contribution Source						
	Balance As Of 01/01/2019	Contributions	Withdrawals	Gains/ (Losses)	Balance As Of 12/31/2019	Vested Balance
EMPLOYER PROFIT SHARING	\$63,039	\$2,569	(\$6,845)	\$12,487	\$71,250	\$70,868
EMPLOYER MATCH	\$2,280,233	\$186,624	(\$353,243)	\$495,989	\$2,609,603	\$2,564,778
EMPLOYEE 401(k)	\$6,352,632	\$496,090	(\$834,072)	\$1,301,078	\$7,315,728	\$7,315,728
EMPLOYEE ROLLOVER	\$350,045	\$0	(\$73,890)	\$53,701	\$329,856	\$329,856
TOTAL	\$9,045,948	\$685,283	(\$1,268,049)	\$1,863,254	\$10,326,436	\$10,281,230
Activity By Fund						
	Balance As Of 01/01/2019	Contributions	Withdrawals	Exchanges	Gains/ (Losses)	Balance As Of 12/31/2019
American Funds New Perspective Fund A	\$590,369	\$39,770	(\$42,414)	\$77,186	\$183,185	\$848,095
American Funds Growth Fund of America A	\$963,277	\$51,213	(\$115,004)	(\$93,105)	\$240,184	\$1,046,564
American Funds Fundamentallnv A	\$901,965	\$38,375	(\$174,735)	(\$65,690)	\$225,490	\$925,406
American Funds American Mutual Fund A	\$877,352	\$35,063	(\$130,701)	\$82,650	\$176,997	\$1,041,361
American Funds American Balanced Fund A	\$940,523	\$67,744	(\$229,325)	\$3,392	\$168,024	\$950,358
American Funds Bond of America A	\$304,135	\$34,245	(\$33,624)	\$80,501	\$30,048	\$415,305
American Funds SMALLCAP World Fund A	\$429,664	\$30,201	(\$18,335)	(\$76,701)	\$119,568	\$484,398
American Funds New World Fund A	\$209,170	\$16,835	(\$9,032)	(\$4,789)	\$59,199	\$271,383
American Funds Capital Income Bldr	\$393,276	\$28,624	(\$12,488)	(\$10,927)	\$70,402	\$468,886
American Funds Cap World Grand IncA	\$236,168	\$14,745	(\$18,592)	(\$3,018)	\$60,764	\$290,067
American Funds Inv Company Of Ameri	\$162,211	\$13,709	(\$8,625)	(\$70,202)	\$35,447	\$132,540
RS Global Natural Resources Fund A	\$145,696	\$26,321	(\$5,702)	\$52,550	(\$31,115)	\$187,749
RS Value Fund A	\$90,775	\$10,198	(\$1,006)	\$59,571	\$34,802	\$194,339
Oppenheimer Gold And Spec Minerals N	\$396,975	\$42,104	(\$37,571)	(\$11,575)	\$186,479	\$576,412
American Funds Money Market Fund A	\$1,395,639	\$110,195	(\$195,750)	(\$223,564)	\$60,283	\$1,146,803
American Funds Trgt Date Ret 2020A	\$8,412	\$11,920	(\$229,525)	\$204,223	\$16,617	\$11,646
American Funds Trgt Date Ret 2025A	\$185,871	\$20,355	\$0	\$1,373	\$34,627	\$242,226
American Funds Trgt Date Ret 2030A	\$377,113	\$16,892	\$0	\$0	\$75,865	\$469,870
American Funds Trgt Date Ret 2035A	\$25,539	\$9,012	(\$1,129)	(\$761)	\$6,978	\$39,639
American Funds Trgt Date Ret 2040A	\$308,831	\$16,196	\$0	\$0	\$76,300	\$401,328
American Funds Trgt Date Ret 2045A	\$6,344	\$4,953	\$0	\$0	\$2,628	\$13,925
American Funds Trgt Date Ret 2050A	\$95,563	\$31,291	(\$4,490)	\$0	\$28,352	\$150,715
American Funds Trgt Date Ret 2055A	\$711	\$5,887	\$0	(\$1,115)	\$900	\$6,384
American Funds Trgt Date Ret 2060A	\$371	\$9,435	\$0	\$0	\$1,231	\$11,037
TOTAL	\$9,045,948	\$685,283	(\$1,268,049)	(\$0)	\$1,863,254	\$10,326,436
Price Per Share By Fund						
	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
American Funds New Perspective Fund A	\$36.28	\$36.02	\$35.33	\$43.16	\$37.67	\$47.26
American Funds Growth Fund of America A	\$42.68	\$41.29	\$42.04	\$49.54	\$42.76	\$51.13
American Funds Fundamentallnv A	\$52.06	\$50.71	\$54.44	\$62.21	\$52.29	\$62.02
American Funds American Mutual Fund A	\$37.14	\$33.85	\$36.83	\$40.80	\$37.51	\$43.52
American Funds American Balanced Fund A	\$24.75	\$23.83	\$24.81	\$27.15	\$24.90	\$28.50
American Funds Bond of America A	\$12.81	\$12.59	\$12.72	\$12.89	\$12.57	\$13.09
American Funds SMALLCAP World Fund A	\$45.31	\$43.63	\$45.98	\$55.80	\$46.90	\$58.83
American Funds New World Fund A	\$53.50	\$50.00	\$51.45	\$66.92	\$57.36	\$70.55
American Funds Capital Income Bldr	\$59.58	\$55.85	\$57.64	\$62.82	\$56.33	\$63.32
American Funds Cap World Grand IncA	\$46.09	\$43.36	\$43.83	\$51.11	\$42.81	\$52.28
American Funds Inv Company Of Ameri	\$37.08	\$33.37	\$36.23	\$40.39	\$33.91	\$39.57
RS Global Natural Resources Fund A	\$24.81	\$15.34	\$23.49	\$23.73	\$12.86	\$9.71
RS Value Fund A	\$33.04	\$28.33	\$27.94	\$26.21	\$20.28	\$24.79
Oppenheimer Gold And Spec Minerals N	\$13.04	\$10.00	\$13.85	\$15.74	\$13.64	\$19.88
American Funds Money Market Fund A	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
American Funds Trgt Date Ret 2020A	\$11.38	\$10.90	\$11.29	\$12.56	\$11.69	\$12.96
American Funds Trgt Date Ret 2025A	\$12.06	\$11.36	\$11.77	\$13.44	\$12.43	\$14.07
American Funds Trgt Date Ret 2030A	\$12.51	\$11.87	\$12.30	\$14.42	\$13.17	\$15.16
American Funds Trgt Date Ret 2035A	\$12.57	\$11.91	\$12.38	\$14.84	\$13.38	\$15.77
American Funds Trgt Date Ret 2040A	\$12.70	\$12.10	\$12.57	\$15.20	\$13.63	\$16.20
American Funds Trgt Date Ret 2045A	\$12.74	\$12.19	\$12.69	\$15.43	\$13.84	\$16.51
American Funds Trgt Date Ret 2050A	\$12.50	\$11.95	\$12.44	\$15.10	\$13.56	\$16.22
American Funds Trgt Date Ret 2055A					\$16.92	\$20.29
American Funds Trgt Date Ret 2060A					\$11.24	\$13.56
* Share price does not reflect fund dividends.						

Good Job

Our lab once again completed the Iron Casting Research Institute testing with great results. Our lab is consistently one of the best performers in this round robin testing.

Six employees recently completed their Level 1 UT certification through WTTI. ***Kudos to all of you!***

For calendar year 2019, we produced more molds and more tonnage than any year in our history. These levels beat all previous records.

Great job to everyone for this achievement!

A **thank you** to all **core assemblers** for all the extra hours put in over the last year!

Thank you and good job to all!

Eric Malcein was accepted into PCT Precision Machining for a trip to Germany.

From Jim Stapleton (BAM) - Industrial Hygiene Services Audit - **Congratulations to Benton Foundry and all involved with the safety program.** The audit results were zero deficiencies with your Self-Insured Accident & Illness Prevention Programs; this is not typical by any means. According to the state audit department, approximately 90% of all audits result in at least one deficiency.

No job is so important that we cannot take the time to perform it safely.

Benton Foundry Annual Sales Meeting
Thursday, October 24, 2019



From Left to Right: Ernie Priebe, Dennis Raber, Sue Hanna, John Harvey, Lori Nafus, Lynn Miller, Brock Smith and Donna Remley

Thank You Received

Sullivan County Action, Inc.
P.O. Box 1
Laporte, PA 18626

November 1, 2019


Mr. Jeff Hall
Benton Foundry
5297 State Route 487
Benton, PA 17814

Dear Mr. Hall,

Thank you very much for your generous donation of \$250.00 to the Sullivan County Health Fair. This donation helped provide free flu and tetanus shots and a wide variety of screenings to nearly 600 Sullivan and surrounding county residents.

The main goal of the Health Fair continues to be keeping Sullivan County residents knowledgeable about health care services and opportunities available to them. The health fair's success depends upon the generous support of our local businesses and agencies. Thank you again and we look forward to your continued support.

Sincerely,


Robert T. Guglielmi
President

Tidbit

**An ostrich's eye is bigger than
it's brain.**

Trivia Question???

***Where would you find the
Sea of Tranquility?***

Answer will be in 1st Quarter 2020

Answer from 3rd Quarter question:

***What is in every episode of
Seinfeld somewhere?***

Superman

Birthdays

February

Amanda Hartman
Taylor Leahy
Jamel Hodges
Marie Lorimer
Scott Vandine
Randy Kadtke
Charles Mengine
Shawn Frey
Fred Hittle
Mike Holena
Matt Lobos
Tom Landy
Gene Ryman
Mark Coleman
Marty Pelas
Travis Davenport
Ken O'Brecht
Matt Shultz
Mike Shultz
Eric Barnes
Brian Doty
Barb Gottshall
Harry Fry
Amanda Puderbaugh

March

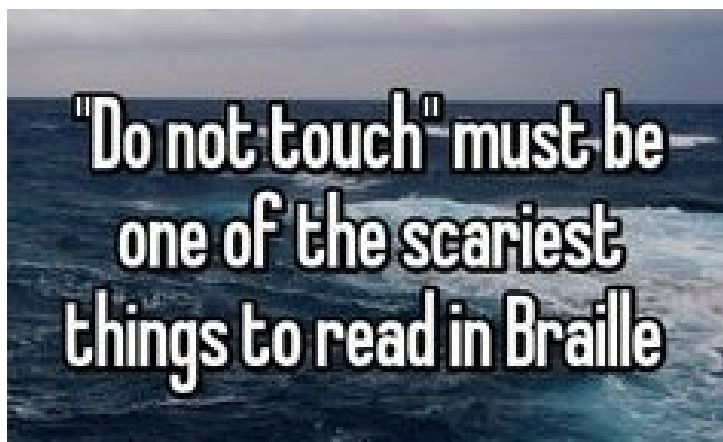
Paul Simko
Mike Modla
Gary Gray
Jeff Jones
Lou Sappé
Al Schumacher
Ron Steward
Lynn Sheatler
Stuart Wolfe
Stephen Mingey
Anthony King
Ken Moss
Michelle Williams
Joe Timko
Tammy Norton
Nathan Foust
Alberto Caban
DuPre PenDarvis
Matt Smith
John Andrews
Tom Foust
Nick Stefanowicz
Greg Vandine
Tim Shepherd
David Straub
Tim Bopp
Austin Puterbaugh
Sherry Nerio
Jon Shaw

April

William Beckey
Ethan Fritz
Paula Winn
Joshua Bullock
Ray Campbell
Julian Thouvenot
Jared Whitmoyer
Andrew Fill
Mike Machuga
Mary Alice Green
Mark Stritzinger
Chris Madl
Arlo Maurer
Sue Hanna
David Yoder
Bob Little
Della Norton
Annette Brown
Tom Kimble
Ed Whitmoyer
Andrew Spencer
Paul Oteiza
Mike Schumacher
Jonas Roper
Joel Placencia
Ed Olexy



Happy Birthday



The Benton Foundry Newsletter is written for the purpose of keeping employees updated on the events surrounding the happenings at Benton Foundry. The intent is to inform and to a certain degree entertain. The foundry in no fashion wishes to demean or embarrass. If anyone has been offended by this publication, please accept our apology. We will be diligent in an attempt to avoid any situations. We hope you enjoy the newsletter and are happy to hear any recommendations to improve it.

Want
\$250.00?
Company Referral Plan
Refer a Potential Employee to Lou
(Before They Come In)
If Hired, After
6 Months of Employment
You Get \$250.00

Oxymoron
Why is "phonics" not spelled the way
it sounds?

Irony



"The Wisdom Well"
"Failure is the condiment that
gives success its flavor."
~ Truman Capote

**B BENTON
FOUNDRY, INC.**